**6.1. Adequate and well equipped laboratories**

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| **Sr.**  **No.** | **Name of the**  **Laboratory** | **No. of students Per setup (Batch Size)** | **Name of the**  **Important**  **equipment** | **Weekly utilization**  **Status (all the**  **Courses for which**  **the lab is utilized)** |
| **Name of the**  **technical**  **staff** |
| **1** | **EDC LAB** | 20 STUDENT EACH SECTION AND 3 STUDENT PER SETUP | P-N junction diode apparatus Zener .diode apparatus Transistor characteristics apparatus . Clipping & Clamping circuit apparatus. Half wave, Full wave bridge rectifier .  Common collector transistor amplifier FET characteristics. Scientech 50Mhz digital storage  Digital function generator 2Mhz. Digital Function generator 2Mhz Two stage R-C coupled amplifier kit. | **24** | **Mr. hemant vashistha ,amit jain** |
| **2** | **Measurement & Instrumentation lab** | 20 STUDENT EACH SECTION AND 3 STUDENT PER SETUP | |  | | --- | | Wein's Bridge (Capacity), Anderson's Bridge, Maxwell Inductance Bridge, | | Wein's Bridge (frequency). Ultrasonic digital distance meter. RTD Trainer kit, | | Single Phase Energy Meter LCR-Q Bridge . Solar Educational Kit Digital Earth Tester | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | | **24** | **Mr.Amit Jain** |
| **3** | Electronic Instrumentation Workshop | 20 STUDENT EACH SECTION AND 3 STUDENT PER SETUP | |  | | --- | | Push Pull Power Amplifier Kit, Voltmeter, Voltmeter, Two Stage R-C Coupled Amplifier, Voltage Regulator, Voltage Multiplier, Opamp Designer Trainer Kit, Bootstrap Sweep Generator, Bjt Trainer Kit , Attenuator &Equaliser CRO, Dual Trace With Ct CRO, Dual Trace With Ct &FG, DECADE CAPACITANCE BOX, Decade Resistace Box, Decade Inductance Box, Digital Multimeter, Emitter Follower , Function Generator Function Generator With Frequency Counter, FET Trainer Kit, Rectifier Trainer Kit, Oscillator Trainer Kit, Opamp Charcterstic Trainer Kit, P-N Diode & Zener Diode Trainer Kit, Power Supply, | | **24** | **Ms. Vaishali Yadav** |
| **4** | **Digital Electronics Lab** | 20 STUDENT EACH SECTION AND 3 STUDENT PER SETU | Scientech Digital Kit(5),  Digital Trainer Kit(10) |  | **Mr.Ramovtar saini** |
| **5** | **Analog Electronics Lab** | 20 STUDENT EACH SECTION AND 3 STUDENT PER SETU | |  | | --- | | Series Voltage Regulator, Shunt Voltage Regulator, Wein's Bridge Oscillator, FET Common Source Amp. Push Pull Amp. Phase Shift Oscillator, Hartley Colpitt Oscillator, UJT Characteristics, UJT Relaxation, MOSFET, CMOS IC, Digital Storage CRO, Function Generator(6),Cro(6) | |  | | **24** | **Mr. hemant vashistha** |
| **6** | **communication lab 1st** | 20 STUDENT EACH SECTION AND 3 STUDENT PER SETU | |  | | --- | | Sampling & Reconstruction Trainer, | | Data Formatting & Carrier Modulation Transmitter , TDM Pulse Code Modulation Receiver, TDM Pulse Code Modulation Transmitter, Delta, Adaptive Modulation & Demod. PAM, PPM, PWM Mod. & Demod. Transmission Line Trainer , CRO, Digital Storage CRO 150 MHz, FM modulation & Demod, DSB/SSB AM Mod.Tx, DSB/SSB AM Demod. Rx, Power Project Board, TDM PA Mod/Demodulator, Dual Power Supply, Data Formatting & carrier modulation / Receiver Trainer, function Generator | |  | | **24** | **Mr. Gaurav Goyal** |
| **7** | **DIGITAL COMMUNICATION LAB** | 20 STUDENT EACH SECTION AND 3 STUDENT PER SETU | |  | | --- | | Pcm, dpcm, cvsd modulation &  demodulation trainer | | Msk modulation & demodulation  Trainer Delta ,adeptive delta , | | sigma delta Mod. & Demod trainer | | Cyclic code experimental setup | | Block code encoder , Block code decoder | | Ask, Fsk Bpsk, Dbpsk experimental  Setup Tdm-Pam trainer kit | | Sampling & Reconstruction trainer, | | Data Formatting and Carrier modulation | | Data formatting & carrier Demodulation | | 4 channel Tdm-Pcm transmitter  Receiver, Qpsk, Oqpsk, dqpsk  modulation & demodulation trainer | |  | |  | **Mr. Gaurav Goyal** |
| **8** | Microprocessor Lab | 20 STUDENT EACH SECTION AND 3 STUDENT PER SETU | Microprocessor kit 8085(15) |  | **Mr.Rajesh Yogi** |
| **9** | MICROWAVE LAB | 20 STUDENT EACH SECTION AND 3 STUDENT PER SETU | |  | | --- | | klystrone power supply , Gunn power supply, | | Microwave test bench(klystron), Microwave test bench (gunn diode) | | Spectrum analyser, Vswr meter | | Solid state klysrone power supply | | CRO 150 mhz, Microwave test bench(klystron) | | Microwave test bench (gunn diode) | | Microwave test bench (s band) | |  | **Mr.Rakesh Talwara** |
| **10** | **ANTENNA AND WIRELESS COMMUNICATION** |  | |  | | --- | | GPS TRAINER KIT, RADAR TRAINER KIT | | Cro dual channel, function generator, cdma direct sequence spread, spectrum (dsss) trainer kit, antenna trainer lab ats40, antenna trainer ats2000, satellite communication trainer kit, antenna digital rf tx ats200it, antenna digital rf rx ats200it, antenna stepper motor controller ats2001s, satellite communication trainer up link tx, satellite communication trainer down link rx, satellite communication trainer, | | Satellite transponder, fiber optic trainer | | Fiber optic connectors kit display board, fiber optic cable sample kit display board, laser trainer model lt2506, voice communicatioin using dsss | |  | |  | |  | **Mr.harish kumar** |
| **11** | **Electronic Engineering Design Lab** | 20 STUDENT EACH SECTION AND 3 STUDENT PER SETU | OpAmp Trainer Kit, Dual Power Supply, Power Project Board, Power Project Board, 3-MHz Function Generator, 30 MHz 4 Trace Oscilloscope, 150MHz DSO, 20MHz CRO |  | **Mr.babulal Sharma** |
| **12** | **ESD Lab** | 20 STUDENT EACH SECTION AND 3 STUDENT PER SETU | MICROCONTROLLER KIT(5) ,LOGITECH KEYBOARD |  | **Mr.Rajesh Yogi** |